

EOSTOMIAS EXIMIUS JORDAN & GILBERT, 1925 (PISCES):
REQUEST FOR SUPPRESSION OF A NEOTYPE FOLLOWING
REDISCOVERY OF HOLOTYPE. Z.N.(S.) 1964

By Robert J. Lavenberg (*Los Angeles County Natural History Museum,
California 90007, U.S.A.*)

In 1966, Jules M. Crane, Jr., designated a neotype for the fossil fish species *Eostomias eximius* Jordan & Gilbert, currently known as *Chauliodus eximius*. This designation occurred in a paper entitled "Late Tertiary radiation of viperfishes (Chauliodontidae) based on a comparison of Recent and Miocene species" and published as Los Angeles County Museum, Contributions in Science 115, on December 28, 1966. The neotype was designated on page 22, lines 30-36.

2. Dr. Crane clearly differentiates the taxon *eximius*, pages 22-23, from all other Recent and fossil members of the genus *Chauliodus*. Dentition, vertebral ossification and dorsal fin origin are characters used in the diagnosis. The neotype was sufficiently described in the original publication, page 22, to ensure all future recognition. A specimen in the Natural History Museum of Los Angeles County, LACM 11044, was designated as neotype. Six additional specimens were designated as plesiotypes, LACM 5253, 11048, 11439, 11440, 5242, 10163.

3. In my opinion the belief that the holotype of *Eostomias eximius* was lost as presented on page 2 is a sufficient statement by the author. Although no information is offered on the steps which were taken to trace the existence of the holotype, I believed after discussions with the author, that the type was indeed lost.

4. Original type material of *Eostomias eximius* consisted only of the holotype. No definite statement regarding the consistency of the neotype with the description and characters published by Jordan is given by Dr. Crane. Dr. Crane believes that only a single fossil species exists, page 16, and since Jordan's name holds priority it must be used to designate the fossil species. Apparently there is some question as to the observable characters in specimens from two different localities in southern California. Consequently a plesiotypic series needed to be established according to Dr. Crane. This series was established in this paper, page 22.

5. The neotype came as nearly as practicable from the original type locality. It is clear from the presentation by Dr. Crane, pages 16, 20, 22, that he purposely chose a specimen from Lompoc, California, of the upper Modelo Formation, as the neotype. The original holotype is from the Modelo Formation of the Lompoc area.

6. Article 75(c)6 was satisfied on page 22 wherein Crane states that the neotype is the property of the Natural History Museum of Los Angeles County.

7. A large wooden crate which had been shipped from Los Angeles to Stanford University sometime in 1943 contained the holotype of *Eostomias eximius*. This material had been borrowed by Lore David for her contribution

on the Miocene fossil fishes of southern California. After arriving at Stanford University in 1943, the crate was misplaced and remained lost. When Stanford University closed its Natural History Museum, all of its collections went to the California Academy of Sciences.

8. On June 1, 1970, Camm C. Swift found the unopened crate at the California Academy of Sciences. Inside this crate a number of previously lost and misplaced specimens were found, including the holotype of *Eostomias eximius*.

9. The original description of *Eostomias eximius* was presented in a publication by David S. Jordan entitled "The fossil fishes of the Miocene of southern California". It was published in 1925, December 31, in the journal Stanford University Press, University Series: Biological Sciences, volume 4, number 1, 51 pages. The text description appears on page 13, and is co-authored by Jordan and James Z. Gilbert. A photograph of the holotype occurs on plate III, c.

10. Under Article 75(f) I am hereby informing the Commission of the rediscovery of the type material of *Eostomias eximius*. In view of the rediscovery of the holotype, there is no need, or justification, for a neotype. The fish in question is a member of the primitive Salmoniform family Chauliodontidae. There is but one genus currently recognized within the family. The fossil genus *Eostomias* is currently considered by neontologists and paleontologists as synonymous with the Recent genus *Chauliodus*. There are relatively few Recent species of *Chauliodus*, and only one fossil species currently recognized. These fishes are inhabitants of very deep water and are peculiarly adapted to the deep-water environment. Luminescent tissue is highly developed along the flanks and venter of the fish. The jaws and dentition are highly modified for their piscivorous diet. These fishes are of no consequence as food species and would have relatively little application to applied zoology.

11. I therefore request the International Commission to suppress the neotype designation by taking the following action:

place the specific name *eximius* Jordan & Gilbert, 1925, as published in the binomen *Eostomias eximius*, as defined by the holotype, on the Official List of Specific Names in Zoology.

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